BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents *will not* correct images, please do not report the images to the Image Problem Mailbox.

RAY K. SHAHANI
ATTORNEY AT LAW

Registered Patent Attorney - Technology and Intellectual Property Matters
http://www.attycubed.com

Twin Oaks Office Plaza
477 Ninth Avenue, Suite 112
San Mateo, California 94402-1854

Telephone: (650) 348-1444
Facsimile: (650) 348-8655
e-mail: rks@attycubed.com

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: AKBARIAN ET AL.	**DECLARATION OF GREGORY VAN BUSKIRK**
Serial No.: 09/620,892	
Filing Date: July 21, 2000	
Attorney Docket No.: CLX-501 (316.36)	
Title: DRY-CLEANING PROCESSES AND COMPONENTS THEREFOR	Examiner: KUMAR, Preeti.
	Group Art Unit: 1751

Commissioner of Patents and Trademarks
P.O. Box 1450
Alexandria, VA 22313

DECLARATION OF GREGORY VAN BUSKIRK

I, Gregory van Buskirk, hereby declare as follows:

1. I am a Research Fellow at the Clorox Company, and have been employed as such since September 1980. My responsibilities include research and development of new laundry products and technologies, including those in support of the Clorox dry cleaning and fabric refreshening dryer product, Clorox Fresh-Care™ At-Home Dry Cleaning. I make this Declaration based upon information provided to me, and my belief therein, as well as my own personal knowledge of facts contained herein.

2. The invention described in the present application is implemented in a cleaning system that has been marketed by the Clorox Company (assignee of the invention claimed in the above-entitled application) under the trademark "Clorox FreshCare™ At-Home Dry Cleaning." The FreshCare™ product is a dry cleaner and fabric cleaner in a dryer system comprising a package containing a bottle of stain remover fluid, a reusable vapor-venting dryer bag, dryer-activation fluid impregnated onto dryer-activated cloths and stain absorbing pads. If necessary, the garment to be cleaned is spot treated with pre-treatment stain remover cleaning fluid (referred to in the patent application as "Pre-Treatment Solution") in combination with the stain-absorbing pad (referred to in the patent application as "Stain Receiving Medium"). The garment or garments are placed into the reusable dryer bag, which allows controlled vapor release. One or more dryer-activation fluid impregnated cloths (referred to in the patent application as "Activator Cloth") are placed into the bag, and the bag is sealed. The bag is placed into the home dryer and in use, the heat from the dryer activates the fabric freshening sheet. The FreshCare™ system is particularly convenient to use, compared to other dry-cleaning systems.

3. The present invention claims use of an absorbent stain-receiving medium, which is absent of undesired material or substances that can deposit or migrate to the article being cleaned. You et al. recognizes that the stain removal solution should avoid materials that leave visible residues (page 19, line 19) yet, in contradiction, You et al. states that the solution can contain FWA, see pg. 23, line 27. Brighteners, also called fluorescent whitening agents (FWAs) are known to cause localized spotting of fabrics when placed in contact with the fabric being treated. In spite of specific references in You et al. and the great trouble expended to discuss that (1) the stain removal solution should avoid staining materials and (2) the cleaning device should be brightener-free, You et al. clearly does not recognize that the stain-absorbing medium itself can lead to stain-invoking materials (e.g., FWAs) being leached back onto the fabric.

4. Notes from the notebook of Helga Snodgrass, a Senior Technician here at The Clorox Company, indicates that use of paper towels in place of stain absorbing pads resulted in "brightener-spotting". This notebook entry is dated April 18, 2000. (Exhibit 1)

5. Addition of optical brighteners is well known in the art of papermaking. The Kirk-Othmer Encyclopedia of Chemical Technology Fourth Edition, Volume 18, page 35 of "Papermaking Additives", identifies "optical brighteners" as common types of papermaking additives. (Exhibit 2)

6. Examiner's attention is respectfully directed to the reference in You et al. that "disposable paper towels and cloth towels such as Bounty-brand towels, clean rags, etc. can be used." (Page 29 lines 24-25.) Clearly, as such paper and cloth towels routinely contain optical brighteners, let alone rags derived from clothing or linens that undoubtedly have been laundered in the presence of FWA-containing detergents, there is no recognition in You et al. that such materials present on the stain-receiving medium might be deleterious to overall performance.

7. As further evidence of the proposition that it is well-known that paper towels contain FWAs, one reference on the Internet: http://home.netcom.com/~egombocz/FAQ.html, advised against the use of paper towels to clean a sensitive piece of scientific equipment "since most contain fluorescent optical whiteners." (Exhibit 3)

8. During about August of 2002, I went to a local Albertson's grocery store and purchased six different brands of paper towels: Bounty (Procter & Gamble), Brawny (Georgia-Pacific), Green Forest (Fort James), Kleenex Viva (Kimberly-Clark), Scott Towels (Kimberly-Clark), and Value Clean (Albertson's). I also obtained a sample of Wipe Away (Fort James) paper towels. Under ultraviolet illumination, every one

of these towels exhibited varying levels of fluorescence, indicating the presence of FWAs, added either deliberately or through use of recycled stock that contained FWAs. Bounty brand appeared directionally to contain the least fluorescence, and the self-identified environmentally-positioned Green Forest appeared to contain the most. These brands are widely available, and clearly the inventors of You et al. did not recognize that use of regular paper towels, etc., could lead to brightener spotting.

9. Lastly, You et al, states "while white is the preferred color" of the stain receiver (see pg. 32, line 17), there is "no other functional limit to the color" (see following lines 18-19). Yet later on (page 43, line 20), the potential of dye transfer is discussed in You et al. with regards to printing that is commonly found on paper toweling. Absent from this teaching is that if the "unlimited" color is not irreversibly bound to the stain receiver, it too can clearly stain the treated fabric as soon as the stain removal solution is communicated between the treated fabric and the stain receiver. This "reverse-leaching" might especially be manifested if either the stain removal solution is applied at such a rate so as to overwhelm the rate of absorbency of the stain-receiving medium, or if application of the stain removal solution exceeds the capacity of the stain-receiver.

10. On November 26, 2003, I confirmed Ms. Snodgrass' experiment from April 2000, and expanded my own from August 2003. First, instrumental readings confirmed the relative order of observable fluorescence under ultraviolet light. Paper towel samples were pre-read with filters to shield the fluorescence, and then post-read without filters. The approximate order of fluorescence (ΔW) was as follows:

Sample	ΔW'*
Green Forest	4.30
Brawny	3.92
Wipe Away	1.53
Viva	1.33
Value Clean	1.21
Scott	0.66
Bounty	(basis)

*NOTE: Values normalized to value of ΔW for Bounty

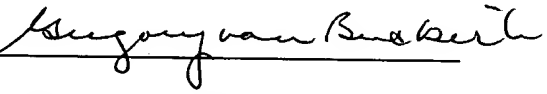
Next, an unbrightened piece of 50% rayon/50% acetate was treated with the inventive Pre-Treatment Solution, treating an approximately 1" diameter area of the fabric, and sequentially using the various paper towels as the Stain Receiving Medium. The treated fabric was left in contact with the Stain Receiving medium for five minutes, after which the fabric was allowed to dry.

The resulting staining due to extracted fluorescent whitening agents was difficult to measure instrumentally, due to the fact that the fluorescent whitening agents from the paper towels wicked out on the treated fabric, forming a ring of stain. However, under ultraviolet illumination, the ring of fluorescent whitener on the treated fabric was readily visible for every area that had been in contact with the corresponding paper towels.

This is further evidence that use of paper towels or other Stain Receiving Media containing FWAs or other optical brighteners may result in brightener spotting.

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that any willful false statement and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Dated: December 2, 2003

By: 

Gregory van Buskirk

Research Fellow

Project No.

Book No. 7574 TITLE (SNOOGEASS)

Page No.

Searching for Formula variation that works on new salad dressing and removes oil ring on both old and new dressing We switched from Catalina to Vinaigrette Dressing.

SURFACTANT PERFORMANCE ON WOOL (SUMMER)

FABRIC: WOOL

Formular	Coffee	Red Wine	Ink	Spagh.Sauce	Gravy	Catalina	Make up	Sebum	Lipstick	Choc. Syrup	Ring	Total Removal	
Surfactants in H2O													
0.03% Surfonic 24-4	Y	TR	TR	Y	Y	N	N	N	N	Y	N		
0.20% Surfonic 24-4	Y	TR	N	Y	N/A	N/A	N/A	N/A	N	N/A	N	LOOKING FOR LIPST	PERFORM
0.05% Surf. JL-80X	Y	Y	N	Y	Y	Y	Y	N	N	TR	Y		
0.2% Surf. JL-80X	N/A	N/A	N/A	TR	N/A	N	N	Y	N	Y	Y		
0.2% TERGITOL TMN3	TR	N/A	N	TR	TR	N	N	N	N	TR	N		
0.20 TMN3 & 0.90 TMN	Y	Y	N	Y	Y	N	N	Y	N	Y	Y		
0.1% Dow Fax	Y	TR	N	Y	Y	N	N	N	N	Y	N		
0.2% Surf. LF-40	TR	Y	N	Y	Y	N	N	Y	N	TR	N		

By itself no surfactant removed salad dressing oil and Lipstick.

Surfactant Surfonic N-40 not soluable in Water, works only with other surfactants.

Used Wipe-Away papertowels instead of pads, this produced brightener spotting on the wool fabrics. Retested with pads no spott Don't use papertowels in the place of pads unless there is no brightener in papertowel, brightner transfers to some of the clay-clean fabrics.

To Page 6

Witnessed & Understood by me.	Date	Invented by	Date
		Recorded by Olga M. Smolej	4-18-2002

TIVE EDITOR
I. Kroschwitz

EDITOR
Howe-Grant

KIRK-OTHMER

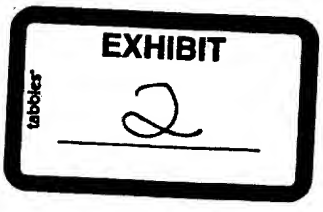
ENCYCLOPEDIA OF CHEMICAL TECHNOLOGY

FOURTH EDITION

VOLUME 18

PAPER
TO
PIGMENT DISPERSIONS

A Wiley-Interscience Publication
JOHN WILEY & SONS
New York • Chichester • Brisbane • Toronto • Singapore



PAPERMAKING ADDITIVES

In papermaking, chemicals can be added either to the pulp slurry prior to sheet formation, ie, internal or wet-end addition, or to the resulting sheet after complete or partial drying, ie, surface or dry-end addition. The method chosen depends on retention and the desired effect. For example, strength additives usually are added internally if uniform strength throughout the sheet is wanted, but they are applied to the surface if the need is for increased surface strength. If an additive cannot be retained efficiently from a dilute pulp slurry, then it is better to apply it to the surface of the sheet.

Papermaking additives can be categorized either as process additives or as functional additives. Process additives are materials that improve the operation of the paper machine, such as retention and drainage aids, biocides, dispersants, and defoamers; they are primarily added at the wet end of the paper machine. Functional additives are materials that enhance or alter specific properties of the paper product, such as fillers (qv), sizing agents, dyes, optical brighteners, and wet- and dry-strength additives; they may be added internally or to the surface of the sheet.

Environmental constraints on the paper industry have resulted in drastic processing changes, primarily because very large amounts of water are used to produce paper. If chemical additives are not efficiently retained in the sheet, in addition to losing the value of these materials, the concentration of these materials increases in the white-water system (the water drained and pressed from the fibers as the sheet is being formed). As paper mills become more closed, ie, as they reuse the white water many times over before treating and discharging it, retention of papermaking additives becomes more critical because the unretained materials also negatively impact the performance of newly added materials as well as the finished sheet. Retention of papermaking additives also becomes more difficult with the increased use of recycled waste fiber and the closing of the water system, because the conductivity and amount of soluble materials increase under these conditions. Some additives become electrostatically neutralized by these materials; others are forced to compete for binding sites on the cellulose fibers.

The U.S. Environmental Protection Agency (EPA) proposed the "cluster rule" for the paper industry in December 1993; it provided detailed and comprehensive guidelines regarding discharges of harmful materials to the air, water, or soil (sludge) (1). The revised Clean Air Act (1990) also identified hazardous air pollutants whose discharge is stringently regulated (2). Numerous regional, state, local, and foreign national regulations exist concerning emissions to air, and discharges to water and sludge. OSHA workplace regulations may have also altered the additive process and the choice of additives.

In addition, many grades of paper and paperboard are used in direct or indirect contact with foods. Thus, many mills only use paper chemicals that have been cleared for use by the U.S. Food and Drug Administration (FDA) (3), so that it is not necessary to segregate machine broke (off-grade paper and edge clippings that are reclaimed for their fiber value) and white water. Most of the chemicals discussed in this article are approved by the FDA for use in paper and paperboard that are intended for applications in food processing and packaging.

Excerpt from **http://home.netcom.com/~egombocz/FAQ.html**

Maintenance

- **Q: What areas of the instrument need periodic maintenance?**
  A: You need to wipe out the interior surface under the buffer wells periodically with a soft sponge with distilled water. Check the calibration targets for liquid spilling. If you notice spots on the targets, wipe them off carefully with a soft, water soaked cloth (Do not wipe them with paper towels, since most contain fluorescent optical whiteners!). Clean the airfilters every 6 month.
- **Q: Can I change the excitation lamp?**
  A: *Yes.* The user can change the excitation lamp, since it is a self-aligning, self-centering light source. Please observe the directions for lamp change carefully. NEVER turn the instrument on without a lamp connected, and NEVER change a warm lamp!
- **Q: Where are the airfilters located, and when should I clean them?**
  A: The airfilters are located on the *bottom side* of the instrument. In order to clean them, please take buffer tanks, gel and applicator out of the instrument *before* you attempt to clean the airfilters. Tilt the instrument sideways, so that the legs are on the left side when you look at the instrument from the front. The main squared airfilter (area under the stage) snaps in and out and should be cleaned like a air conditioner filter. Do not forget to also clean the 7 circular, small airfilters which are secured with a O-ring.

< Index" BORDER=0 HEIGHT=21 WIDTH=22 ALIGN=TEXTTOP> Back to Index

Year 2000 Compliance

- **Reminder: You should have checked 1415 days ago ...**

- **Q: Is the HPGE system (hardware and software) Year 2000-compliant?**
  A: *Yes (all Windows'95 versions from 2.12 or higher, using the update kit).* The Year 2000 problem in computers ("Y2K-bug") is based on the fact, that computer chips, operating systems and application software mostly relied on only 2-digit date fields, which will turn to "00" at the end of the millenium. Within the HPGE system itself, the embedded code relies on time/date information sent from its application software. LabIntelligence has designed a "Year 2000 Update" software, which addresses several issues (some of which are related to computer manufacturer and operating system manufacturer) in one package, which is distributed free of charge to all registered users..
- **Q: What does the "Year 2000 Update" consist of?**
  A: The update consists of a disk with documentation and self-installing files. It addresses the following issues: 1. Check for computer BIOS compatibilty; if not, apply patch for bootup operation; 2. Check and update of operating system: update of DOS and Windows'95 date/time stamp handling with autheticated patch from Microsoft; 3. Version check and update of the HPGE file system for 4digit year and new index system (all previous data will remain compatble and can be converted to the new file system at time of loading, a process coomon to users after some version updates); 4. A log of the successful update will be created. Please read the dcoumentation carefully, which comes with update!..
- **Q: I have not received my update disk. When will I receive it?**
  A: The update disk started shipment end of November 1998. All registered HPGE users will receive notification on their shipment via e-mail. If you are an international customer, please expect delays due to Christmas holiday shipping. You should certainly receive your free update by end of the year.!..

< Index" BORDER=0 HEIGHT=21 WIDTH=22 ALIGN=TEXTTOP> Back to Index

Other Common Questions

- **Q: How can I increase the sensitivity for visualization in IEF of unlabeled proteins?**
  A: In IEF, the visualization of proteins depends on shadowing (flourescence quenching) of the intrinsic fluorescence of the carrier ampholytes. In order to increase sensistivity, you have to increase either this *background fluorescence* or improve the *contrast* between zone and background.
- **Q: What are advantages and disadvantages of black gel trays over clear ones?**
  A: Black gel trays are used for *separations with extreme opaque matrices.* These matrices tend to diffuse fluorescent zones when detected in reflectance mode using the stage mirror enhancement.When used with clear trays, this effect makes zones appear broader.